

ABSTRACT OF THE DISCLOSURE

A magnetic data embedding system (or disk servo writer) includes a stack with a master disk (3) and a plurality of magnetic disks (4) mounted on a shaft of a spindle motor (6), and a rotary positioner (11) which integrally holds one or more read-only heads (7_1 to 7_4) for reading the master disk and a plurality of groups of servo heads (10_1 to 10_4) and which simultaneously turns both of the kinds of heads. The groups of servo heads have access to the top and bottom sides of the magnetic disks. The servo heads are made carry out writing to the same (top or bottom) side of each of the disks in parallel, within assigned track ranges for the respective servo heads. In order to make the servo heads on the same side of the disks carry out writing correctly in their assigned track ranges in several of the disclosed embodiments, an address correction data memory (23) supplies information about track position errors between the read-only heads and their associated servo heads to a servo head address deriving unit (24), which corrects track addresses of items of servo information read by the read-only heads and transmits the corrected track addresses to a servo pattern generator (9) to make the servo heads write the corrected address. This shortens the time needed for writing servo patterns to magnet disks with high density and high accuracy.